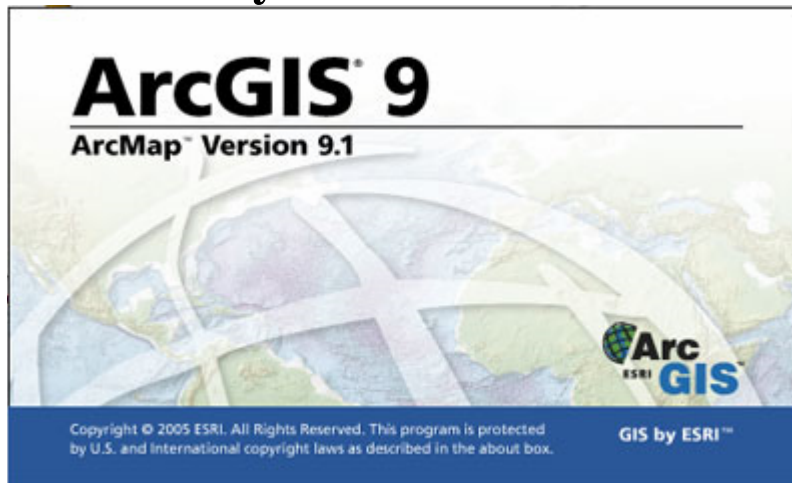# Installing ArcGIS 9x
By Scott Ralston

1. The Naming of the ESRI Software can be a little confusing at times so here is a breakdown of the naming and a relation to a product you may be more familiar with such as Microsoft Office
   a. ESRI (Environmental Systems Research Institute) is the name of the company that makes the software (Like Microsoft)
   b. ArcGIS is the name of the software package (Like Microsoft Office)
   c. ArcInfo is the name of the version of the software package (Like Office Professional Addition). Other lower versions include ArcEditor and ArcView
   d. ArcMap is the name of a program in the software package (Like Microsoft Word). ArcMap is the program you will use the most and is comparable to the old ArcView program.
2. Licensing – ESRI is very careful about licensing for the program. One license means 1 copy of the program can be open at a time. In order to have the license work and to ensure the software isn't pirated a physical USB key (called a sentinel key)

   is needed to be inserted into the computer with the license for the program to work. Be aware that each license cost about $450 which is taken out of the region budget so the station won't directly see the cost. There are different options for installing the license and program. Choose the one that suites your licensing need the best. Order ONLY the number of licenses that will be used at the same time.

Example: If your office has 10 people and you want the program on 10 computers but most likely only 3 people will be using the program at any one time then ONLY order 3 licenses.

    a. Dedicated license – ArcGIS program, license file, license manage and sentinel key are all installed on one computer and only that computer is used for GIS

    b. Shared License – ArcGIS program, license manager and license file are installed on many computers but in order to use the program on the computer users must insert the sentinel key so one sentinel key is shared among multiple computers.

    c. Network License – ArcGIS program is installed on many machines. The sentinel key, license manager and the license (possible to have multiple licenses) are installed on one "Server" machine on the network. Anytime a computer opens the ArcGIS program, a license is "checked out" from the network server. If more computers try to open the ArcGIS program than there are licenses available, users will get an error and not be able to use the program until a license is freed up by another user.

    d. With each license a free laptop (concurrent) license can be requested. This laptop license works the same as option A or B but according to the license agreement, should only be used on a laptop computer.
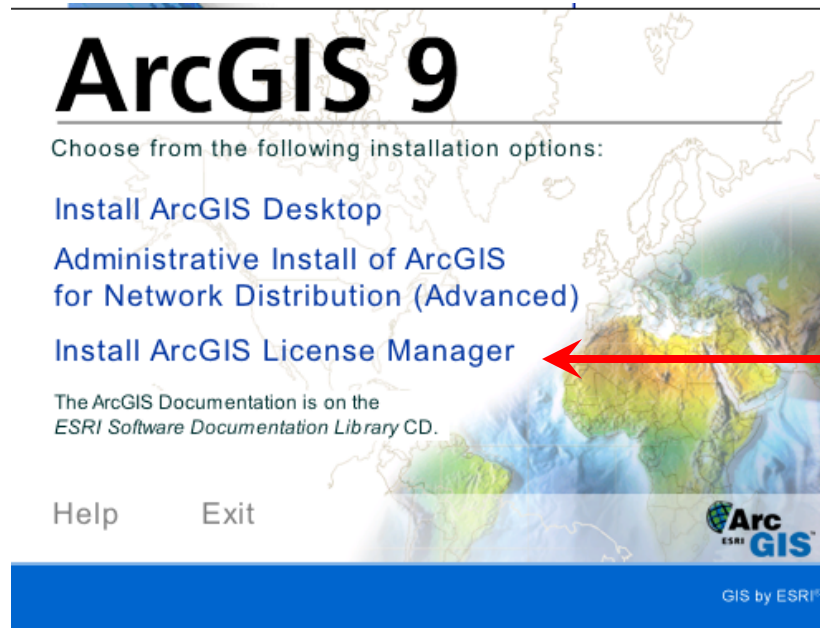
3. Program Components

    a. ArcGIS License Manager – This is a program that must be installed in order to run the program. On a Dedicated, shared or Laptop installation you must install the license manager on the same machine as the software. For the Network install you must install the license manager only on the computer that will serve as you license server. ArcGIS License Manager can be found in the startup menu of both the ArcGIS Desktop CD and the ArcInfo Workstation CD.

    b. ArcGIS Desktop – ArcGIS Desktop is the main program component you will be using. This includes ArcMap, ArcCatalog, ArcToolbox, ArcGlobe and ArcScene. This is the only CD that needs to be installed for most basic users

    c. ArcInfo Workstation – This is another part of the ESRI GIS package that has many powerfully tools. However this part of the program is much less user friendly and uses many command line inputs. For most basic GIS use you will not need to install the Workstation CD.

    d. Crystal Reports – This is a reporting feature for spatial data. It is not required to install but may be used in reporting or summary information.

    e. Support CD's – Other CD's are included with the installation including Sample Data, Street Maps, Tutorials etc. For beginners you may want to install the Tutorial CD.

4. Installing the Program – Choose which method of license installation you would like to perform from the options listed above. Network install is recommended for most office environments where you may have more than one computer.
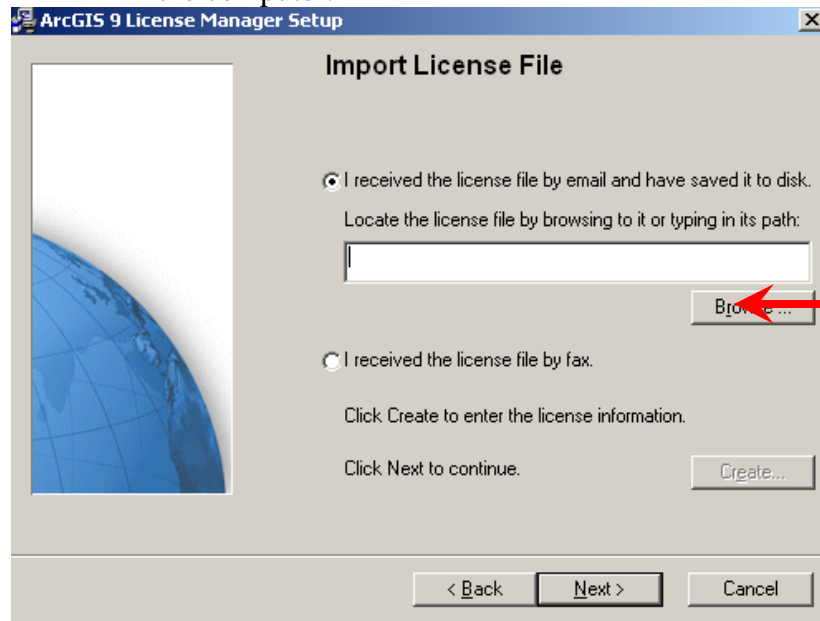
    a. Install License Manager – If using a dedicate, shared or laptop license then install the license manage on each computer you will be using the program

on. If using the network option then only install the license manage or one computer that will serve as your License Server.

    i.   Install the sentinel key

    ii.   Insert the Desktop installation CD.

    iii.   From the startup screen choose Install ArcGIS License Manager

ArcGIS 9

Choose from the following installation options:

Install ArcGIS Desktop

Administrative Install of ArcGIS
for Network Distribution (Advanced)

Install ArcGIS License Manager

The ArcGIS Documentation is on the
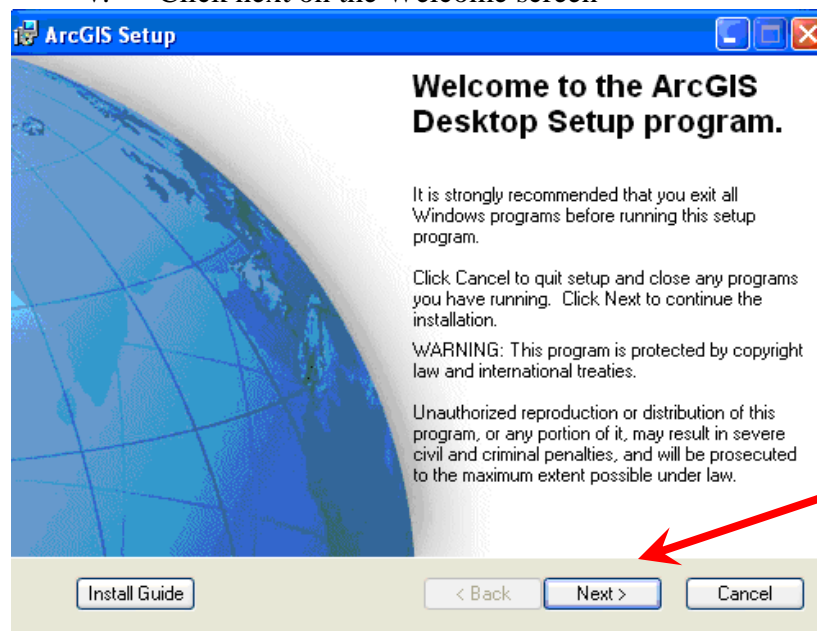ESRI Software Documentation Library CD.

Help   Exit

GIS by ESRI®

    iv.   You should have received a license file by e-mail. The file name will contain the same number as what is printed on the Sentinel Key (the numbers must match). The extension for the file should be something like *.efl9.

    v.   When prompted, browse to the location you saved your file on the computer.
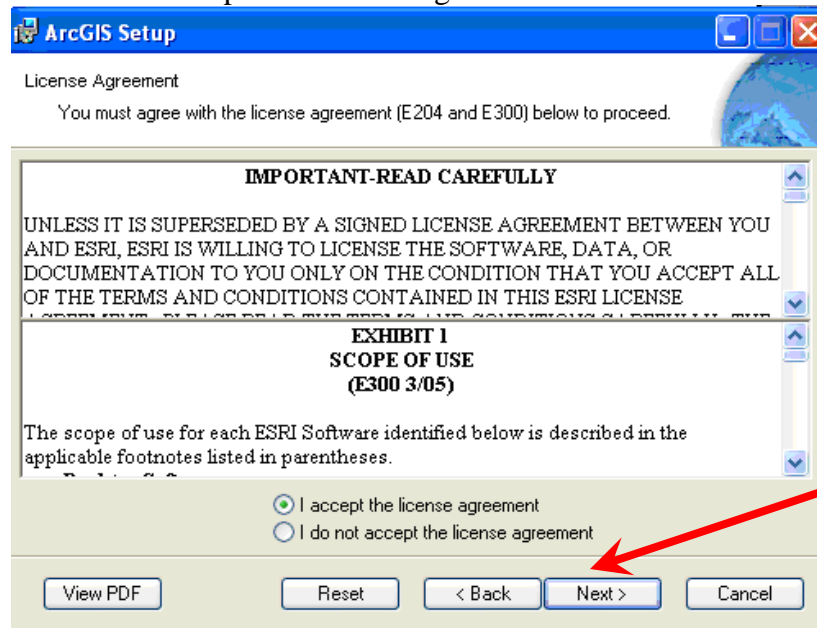
ArcGIS 9 License Manager Setup

Import License File

⦿ I received the license file by email and have saved it to disk.

Locate the license file by browsing to it or typing in its path:

Browse...

○ I received the license file by fax.

Click Create to enter the license information.

Click Next to continue.   Create...

< Back   Next >   Cancel

vi. Click next and install the license manager
b. Install ArcDesktop
   i. Install the license manager first (unless using a network license in which you must install the license on the Server computer first) and insert the sentinel key (locally or on server)
   ii. Insert the ArcGIS Desktop CD
   iii. From the startup window choose Install ArcGIS Desktop
   iv. Do NOT choose Administrative Network Install. See below for the use of this option.
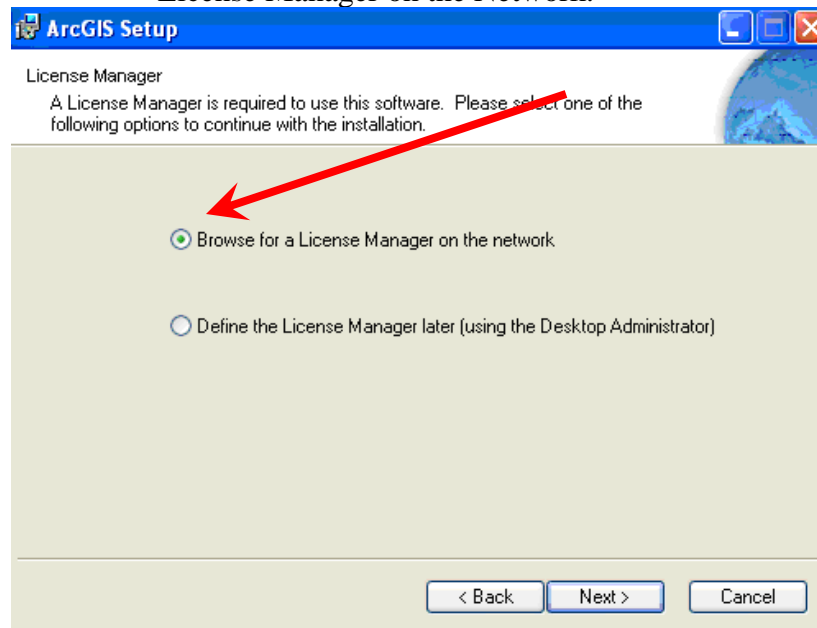

v. Click next on the Welcome screen

vi. Accept the License Agreement and Click Next

vii. If you installed the License Manager correctly on your computer you will be given a choice to accept the License on your computer.
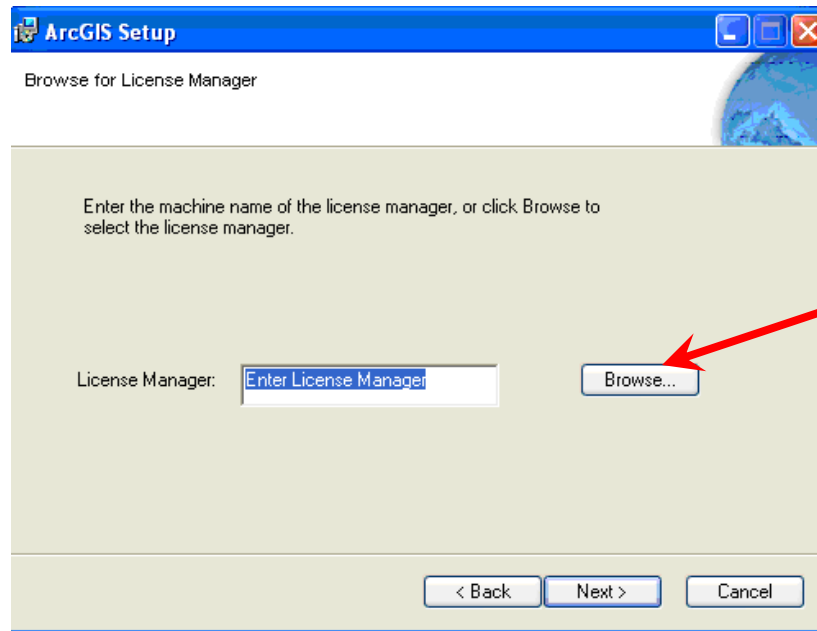
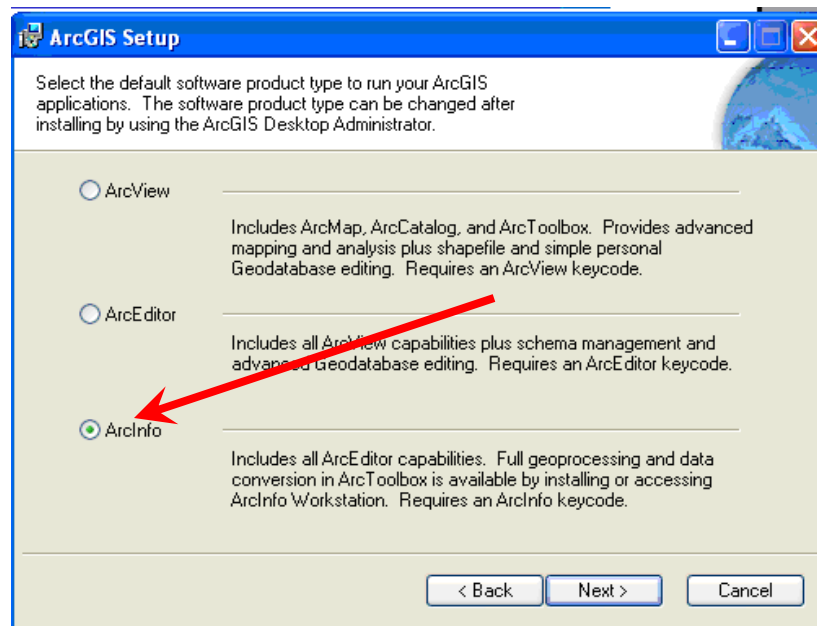viii. If you are using the network license option, choose Browse for a License Manager on the Network.

ix. Enter the name or IP Address of the computer on the network that contains the License Manager.

x. If possible use the computer name instead of the IP Address. If using the IP Address you should be aware that if the computer is restarted the IP Address can change so you must go into your network properties and give the computer a Static IP Address.
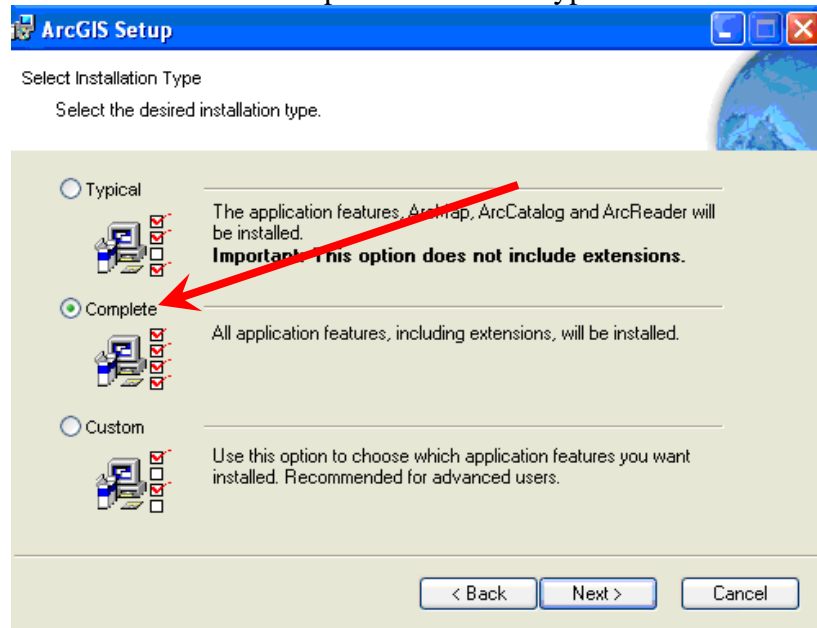
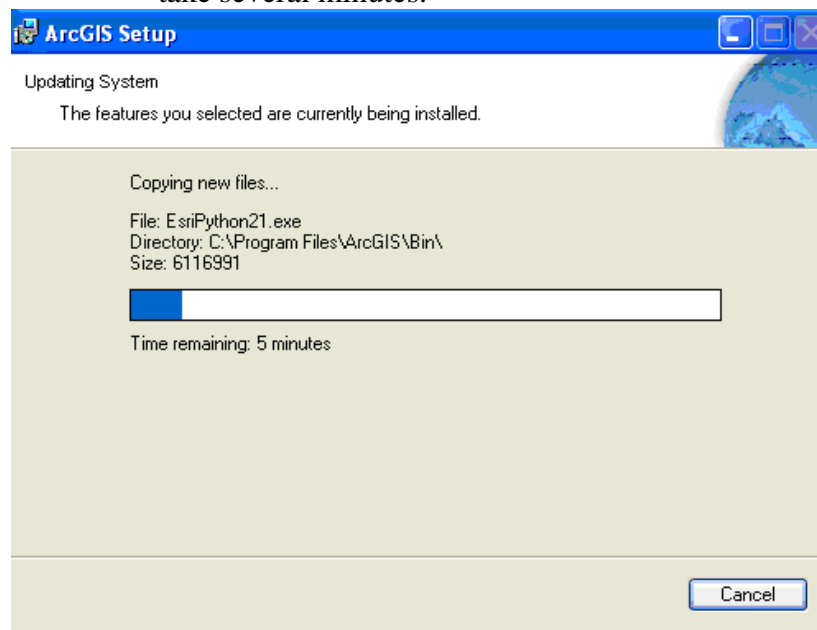xi. You may also browse for the computer on your network.

xii. Choose the ArcInfo option. This is the most complete version of the installation and will give you the most tools.
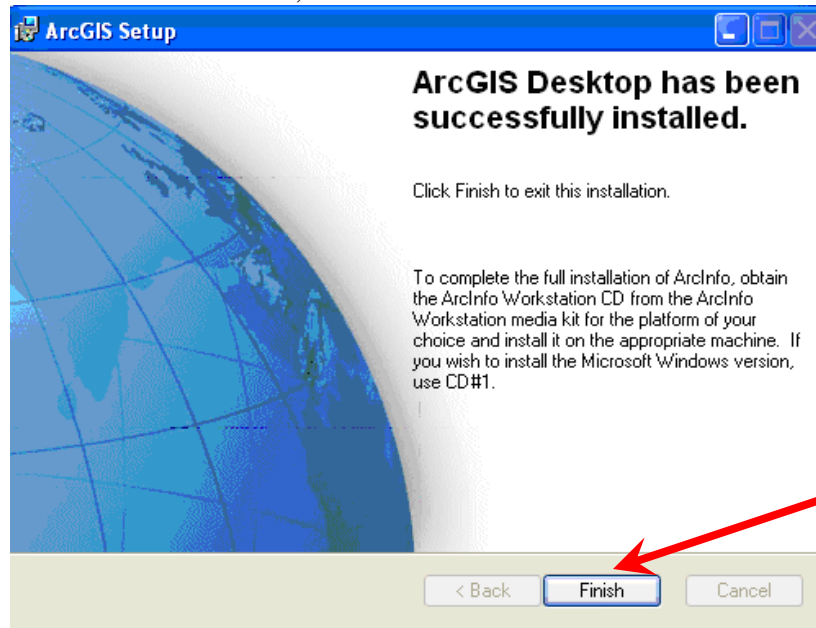
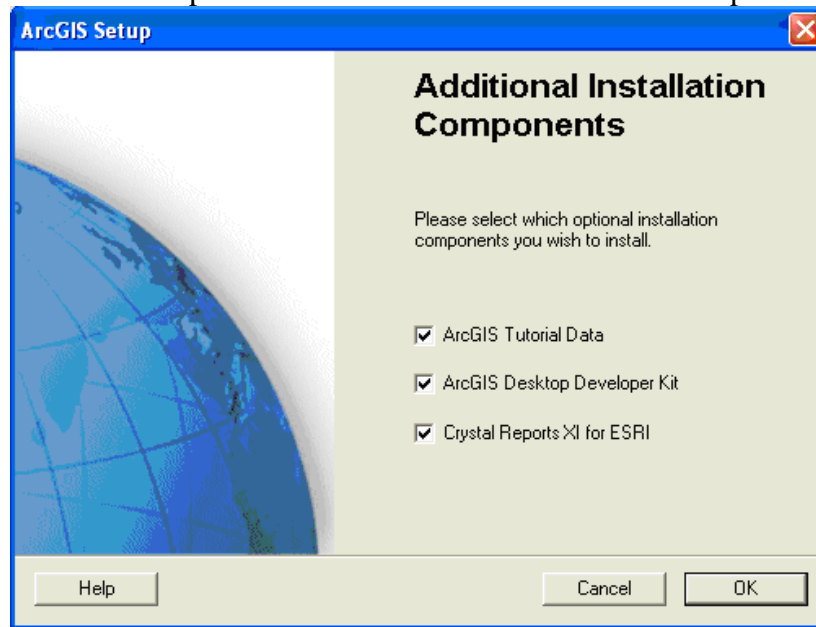xiii.   Choose Complete installation type to include all extensions.

xiv.   Depending on the speed of your computer, the installation may take several minutes.

xv. Once done, click Finish

xvi. You will be prompted for additional Components
xvii. These options are not required.
xviii. Especial most users will not need the Desktop Developer Kit.

5. Network Administrative Install
   a. This option can be used if you plan to use the network license option and have many computers to install the program on.
   b. This option will place an installation file on the network so users can install the ArcGIS software to their computer without using the installation CD's. The path to the license file will also be pre-defined
   c. Install the Sentinel Key and License Manager on your Server computer
   d. Choose the Administrative Install option

    e. Follow the installation steps as seen above including the location of the network license manager but you will also be given a choice of where you want the installation file saved.

    f. When finished run that installation file from the network location you specified on each computer you want ArcGIS installed on.

6. Updates

    a. ESRI constantly provides updates and patches to bugs they find in the program. After installing the program you should visit the ESRI support web site and download the latest Service pack.

    b. Web Site: http://support.esri.com/index.cfm?fa=downloads.patchesServicePacks.listPatches&PID=43

    c. Download and install the Service Pack

7. Extensions

    a. Extensions are sub-parts of the program that provide additional tools. Many extensions are included with the program.

    b. After installation enable all extensions so you will not be inconvenienced at a later time when you need the tools. Turn on all available extensions by opening ArcMap and under the Tools>Extensions menu, check all options you have a license for.

    c. To access the tools for the extensions as needed, turn on their toolbars from the View>Toolbars Menu in ArcMap.

    d. Many 3rd Party extensions area available for ArcGIS from various resources.

        i. X-Tools Pro – It is a very useful extension with many shortcut tools. This extension can be downloaded from their web site at http://www.xtoolspro.com/ . The extension has a free 30 day trial but the Service has bought a license. Contact your HAPET office or the Regional Office for license registration information.

ii. Hawth's Tools – This is a free extension developed by an ecologist. It has many environmental research based tool. It can be found at http://www.spatialecology.com/htools/index.php

iii. Image Analysis – ERDAS has spatial analysis tools that are mostly used for Raster data types. This extension can be downloaded off their website but the license must be bought. The Service does not have a license contract at this time. http://gis.leica-geosystems.com/

iv. Trimble – Trimble has an extension to assist with their GPS units. The Software can be downloaded on their web site http://www.trimble.com/mgis_software.shtml . but must be bought.

v. DNR Garmin – This software runs outside of ArcGIS but has options to import or export data to ArcGIS. It has many handy tools for dealing with GPS data. The tool is free from their web site: http://www.dnr.state.mn.us/mis/gis/tools/arcview/extensions/DNRGarmin/DNRGarmin.html